

Wisconsin Crop Manager

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Contents

Controlling Rootworms Using Traits Plus Soil Applied Insecticides	18
Chuck Bolte: 2016 WI CCA of the Year	19
2015 Corn Herbicide Evaluation Program Results...	20
UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update	21
Wisconsin Soybean Marketing Board Continues Free Nematode Testing Program for 2016	21

base of the corn plant. It does not provide protection for roots that have grown outside the area influenced by the soil insecticide. Therefore, larvae feeding on those roots are exposed to a single mode of action and repeated use of the same, or similar protein, will continue to select for resistance.

Using CRW traited corn plus a soil insecticide may have economic value if you are planting into a field with verified high populations of rootworm adults in 2015. By “verified” I mean that detailed count(s) of adult beetles were completed during the 2015 egg-laying period and you had reason to believe excessively high beetle populations warranted a combination of control methods. While high beetle populations may be the case in a few fields around the state, it is definitely not the norm and certainly not consistent from field to field. This comment is supported by examining Wisconsin Department of Agriculture, Trade and Consumer Protection (WDATCP) whole plant count beetle surveys, Figure 1, and by reviewing the raw data graciously supplied by Krista Hamilton and her colleagues at WDATCP.

First, let me summarize the map. Overall, 229 fields were sampled. Only 58 of those fields had populations greater than the economic threshold of 0.75 beetles/plant, indicated by red dots on the map. Of those 58 fields, only 8 fields were higher than 3.0 beetles/plant. I am not implying that fields with greater than 3.0 beetles/plant are considered high, but just trying to indicate the distribution of field averages within that category are at the lower end of WDATCP’s scale. Furthermore, 12 fields had an average between 2.0-2.9 beetles/plant, 15 fields were between 1.0-1.9 beetles/plant and the remaining 23 fields were between 0.8-0.9. Of the remaining 171 fields with sub economic populations, 25 fields were in the 0.5-0.7 beetles/plant (yellow dots), 78 fields were in the 0.1-0.4 beetles/plant (green dots) and the remaining 68 fields (black dots) did not observe any corn rootworm beetles.

WDATCP’s data offers a unique snap shot of 2015 beetle

Controlling Rootworms Using Traits Plus Soil Applied Insecticides

Bryan Jensen
Entomology and IPM Program, UW Extension

I have been getting a few questions regarding the practice of controlling rootworms with a CRW traited hybrid plus a soil applied insecticide. First, I would like to suggest that this tactic would not be considered a resistance management tool. In general, using two effective modes of action can be a good way to manage resistance. However, in this situation, the soil applied insecticide is only an effective mode of action in a limited area at the

counts across the state and is not intended to provide field level control recommendations. However, it does demonstrate the variability of rootworm counts and that a routine recommendation of traited hybrids plus a soil-applied insecticide is not always justified. If you are unsure of the validity of individual field recommendation this growing season, please consider leaving random check strips of either 1) CRW traited corn only or 2) CRW traited corn + soil applied insecticide depending on your decision. Follow up with assessment of root damage in July/early August. For help in assessing root damage, please click the YouTube video link below:



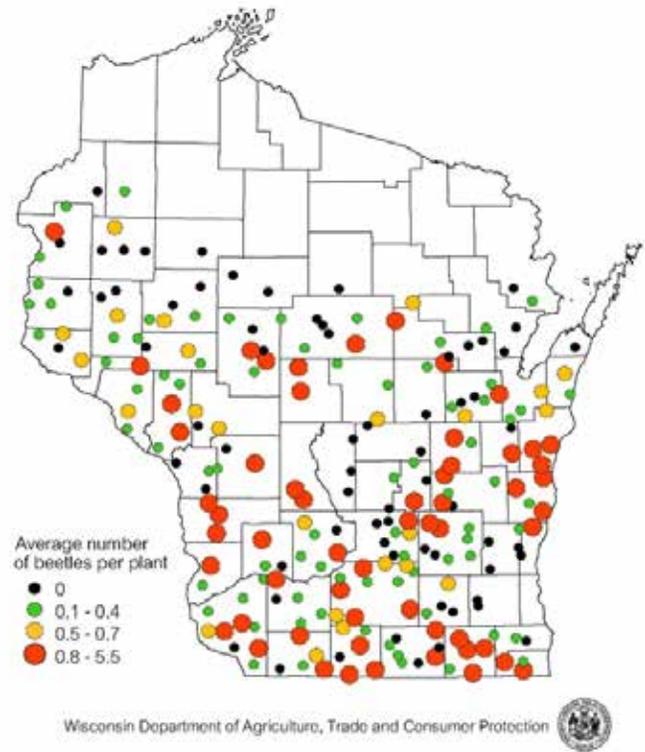
For 2016, the best option to accurately identify management options in continuous corn is to count beetles and base your recommendations on those counts. This field level data will help you choose appropriate recommendation for individual fields. For help scouting beetles, again please click the YouTube video link below:



To view a map of the 2015 Corn Rootworm Beetle Survey Results, please refer to Figure 1.

Figure 1:

Corn Rootworm Beetle Survey Results 2015



Source:

[WDATCP's Wisconsin Pest Bulletin, https://datcpser-vices.wisconsin.gov/pb/pests.jsp?categoryid=4&articleid=2556&issueid=254](https://datcpser-vices.wisconsin.gov/pb/pests.jsp?categoryid=4&articleid=2556&issueid=254)

Chuck Bolte: 2016 WI CCA of the Year

Bryan Jensen
UW IPM Program

Please join the WI CCA Board in welcoming Chuck Bolte as the 2016 Wisconsin CCA of the Year! Chuck is currently working for AgSource Laboratories, Bonduel, WI and has over 20 years of agricultural work experience. Including 15 years of CCA status from Minnesota or Wisconsin. He also holds the 4R NPM specialty certification.

Chuck's background includes internships with Pest Pro's and Jefferson County Land Conservation, a degree from UW Stevens Point which led to fulltime employment at the Richland County Land Conservation Office. A one-

year tour of duty in Iraq ended with a job switch to the Frito Lay Research Station at Rhinelander, WI where he was involved with several areas of research including potato breeding and field trials for chipping potential. Chuck has work for AgSource since 1996 and is currently the manager for the precision agriculture and nutrient management division.

In addition to his normal workload which includes, but certainly not limited to, nutrient management, cover crops and the use of aerial imagery to plan management zones and to write VRT recs for lime and potash, he has been actively involved with writing grants and working with farmer led watershed projects.

Chuck's volunteer service includes the Langlade County Breakfast on the Farm, Women in the Outdoors, mentoring youth hunts, high school career day speaker, membership and committee service with the Wisconsin Association of Professional Agricultural Consultants and a Farm Bureau Member.

Many thanks to Steve Peterson for initiating Chuck's nomination as well as Bill Page, Tim Boerner, Mary Fronck and Paul Sturgis for their letters of support.

Congratulations Chuck!



2015 Corn Herbicide Evaluation Program Results

Mark Renz, Agronomy Department, University of Wisconsin-Madison, University of Wisconsin Extension

Dave Stoltenberg, Agronomy Department, University of Wisconsin-Madison

Evaluation of new and existing herbicides for use in corn has annually occurred in Wisconsin for over 30 years. This program continues to compare effectiveness of weed

control of herbicides applied at a range of timings and rates. In many cases crop safety and yield are also evaluated. 2015 corn herbicide results are now summarized and available (see below for details).

Research was conducted at Arlington Agricultural Research Station (2 trials) and Rock County farms in Janesville Wisconsin (4 trials). **Please click on the Trial ID link for a pdf** of the application information and summarized results. Note that values are an average of four replications. Standard deviations are also provided as often responses (e.g. weed control, crop yield) to any treatment can vary within a trial. Consider this variability in addition to average values when comparing treatments.

Location (Trial ID link): Herbicides Evaluated

Arlington ([15-ARL-CN01](#)): Anthem Maxx, Hornet, Durango, Dual II Magnum, Roundup, Sharpen, Solstice, Surestart, Zemax, Verdict

Arlington ([15-ARL-CN02](#)): Anthem Maxx, Armezon, Cadet, Capreno, Diflexx, Durango, GF-3471, Harness, Impact, Laudis, Liberty, Outlook, Roundup, Sharpen, Solstice, Status, Surestart II, Verdict, Zemax, Zidua

Janesville ([15-ROK-CN03](#)): A20540, Acuron, Atrazine, Capreno, Instigate, Mesotrione, Parallel, Rimsulfuron, Surestart II, Verdict

Janesville ([15-ROK-CN04](#)): Acuron, Anthem ATZ, Atrazine, BAS 67703H, Harness XTRA, Lexar EZ, Lumax EZ, Roundup, Verdict, Sharpen, Surestart II, Zemax, Zidua

Janesville ([15-ROK-CN05](#)): Anthem ATZ, Armezon, Atrazine, BAS 67703H, Callisto XTRA, Capreno, Dual II Magnum, Halex GT, Laudis, Outlook, Roundup, Status, Verdict, Zidua

Janesville ([15-ROK-CN06](#)): Aatrex, Halex GT, Harness, Impact, Roundup, Status

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NOTE: Any information presented here is NOT an endorsement or recommendation of any one product over another. Some treatments may not be legal for use in parts of Wisconsin or beyond. **Please read the label carefully and follow the directions provided on the label.**

UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Sean Toporek, and Ann Joy

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from March 19, 2016 through March 25, 2016.

Plant/Sample Type, Disease/Disorder, Pathogen, County

Specialty Crops

Hop, Carlavirus, *Unidentified carlavirus*, Dane/ Polk

Soil

Soybean Soil, Soybean Cyst Nematode, *Heterodera glycines*, Dane

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.

Wisconsin Soybean Marketing Board Continues Free Nematode Testing Program for 2016

Shawn P. Conley, Soybean and Wheat Extension Specialist, Department of Agronomy

Four out of every five animals on earth today is a nematode so it is not surprising that agricultural fields are home to many nematode species. Fortunately, most nematodes are beneficial to crop growth and soil health because their activities help decompose crop residues and cycle nitrogen and other nutrients. Pest nematodes do not threaten yield if their numbers remain low. The key to avoiding population explosions of nematode pests is to be proactive – know what the situation is and take appropriate measures when nematode numbers indicate a problem is brewing.

The WSMB sponsors [free nematode testing](#) to help producers stay ahead of the most important nematode pest of soybean, the soybean cyst nematode (SCN) (Figure 1). Eggs of SCN persist in the soil between soybean crops so a sample can be submitted any time that is convenient. The soil test report indicates the number of eggs in the

sample and is useful for selecting the right variety for the next soybean crop. Retests of fields planted with SCN-resistant varieties over multiple years shows how the nematode population is responding to variety resistance and provides an early warning should the nematode population adapt to host genetics.



In 2016, the WSMB is again offering the expanded nematode testing program to include other pest nematodes in addition to SCN. These nematodes are less damaging to soybean than SCN but can cause enough yield loss to warrant treatment. As is the case for SCN, there are no rescue treatments for nematodes so the primary purpose of this year's soil test is to plan for next year's crop. Soil samples collected in corn for nematode analysis have predictive value for explaining yield if they are collected before the corn V6 growth stage. Sampling early in the season will provide information about the risk potential for the current corn crop AND the next soybean crop.

The assays used to recover nematode pests other than SCN in soil require that the nematodes are alive. So, it is important to keep the samples moist and at least room temperature cool. Collecting a sample that includes multiple cores ensures that there will be plenty of root pieces to assay. It is not necessary to include live plants in the sample. The soil test report will indicate which pest nematodes are present and at what quantities and their damage potential to soybean and corn based on the numbers recovered.

Free soil sample test kits are available now and can be requested at (freescntest@mailplus.wisc.edu).

For more information on [SCN testing and management practices](#) to help reduce the losses from this pest, please contact: Shawn Conley: spconley@wisc.edu; 608-262-

7975 or visit www.coolbean.info.



Remember: The first step in fixing a nematode problem is to know if you have one! The WSMB sponsored nematode testing program provides you that opportunity.

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